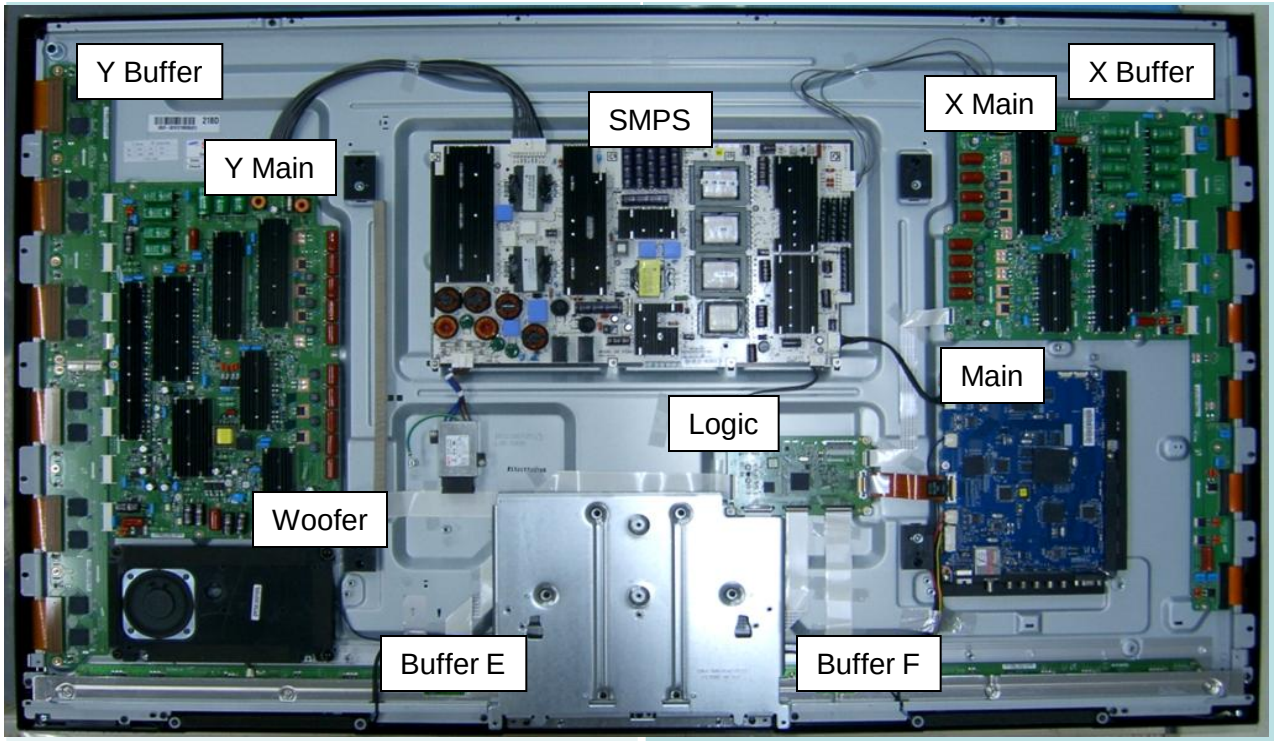


HELP: 1-888-751-4086 (Tech Support)
1-866-894-0637 (FE)

GSPN
http://gspn3.samsungcsportal.com
PLUS ONE
http://my.plus1solutions.net/clientPortals/samsung

HOT TIPS
-Power On Problems: (pg. 3)
-Video Problems: (pg. 4)

Latest Firmware: Please check Samsung.com for latest update!

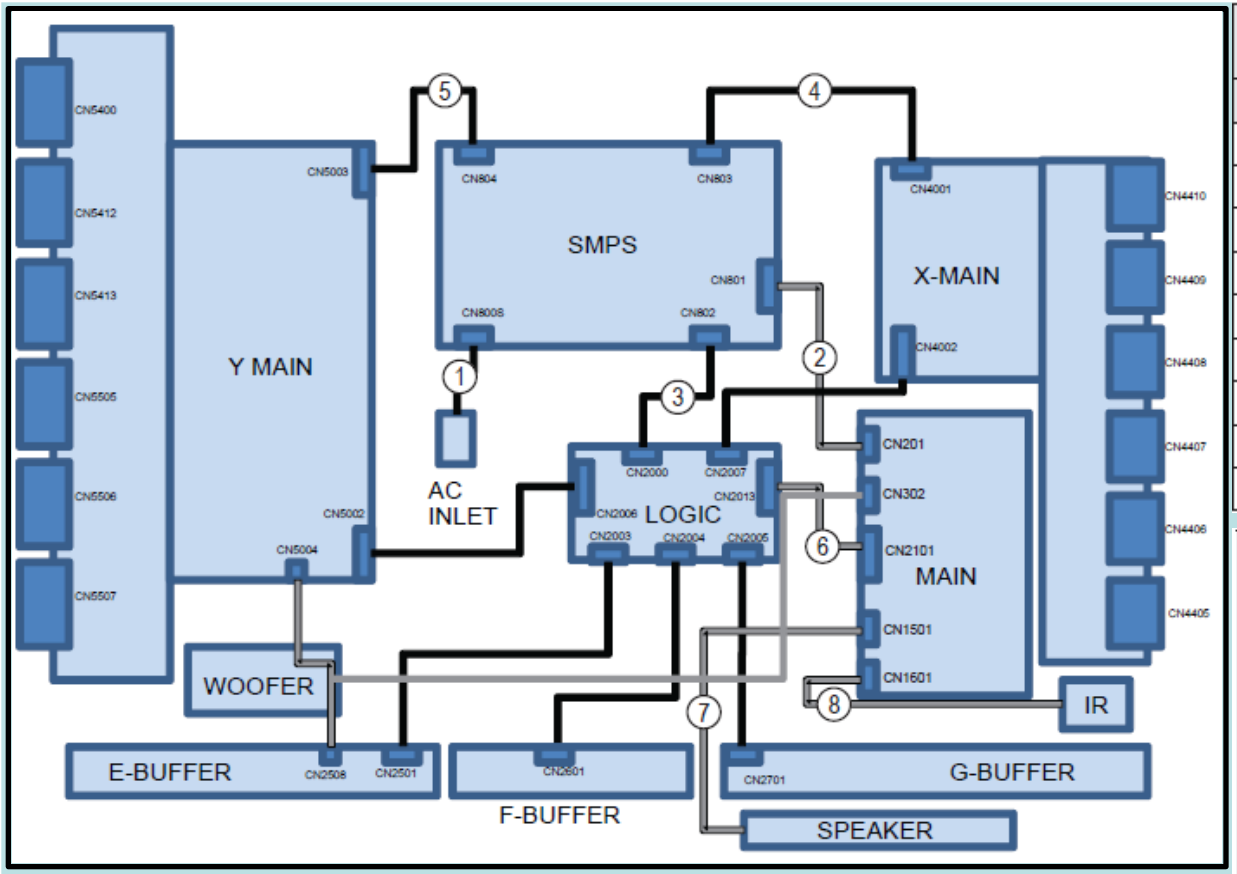
2010 PDP Firmware for Valencia 1G (T-VALAUSC, 1035.0)
■ Firmware for Valencia 1G Model
Ver: 1035.0 Folder Name: T-VALAUSC
Description: Support Netflix 2.1 and MLB.tv apps. And this firmware prevents below issues:
- 3D picture judders when 'Motion Judder Canceller' is set to 'Smooth' or 'Standard'.
- USB Power Overload' message pops up even USB port is not connected
- HDMI ports recognition error and signal loose
- Plug & Play is displayed whenever turning on TV.

No Service Bulletins

Please check GSPN for parts update!

Quick Parts List:

Version	Parts No	Short Description
I003	BN44-00334A	SMPS
I003	BN94-03316Q	Main PCB
I003	BN96-12687A	Buffer F
I003	BN96-12688A	Buffer G
I003	BN96-14111A	Logic Main PCB
I003	BN96-14336C	Function & IR PCB
I003	BN96-14977A	X Main
I003	BN96-14978A	Buffer X
I003	BN96-14979A	Y Main
I003	BN96-14980A	Y - Upper
I003	BN96-14981A	Y - Lower
I003	BN96-14982A	Buffer E
I003	BN96-13433A	Panel
I003	BN96-12993C	Front Cover
I003	BN96-13009C	Rear Cover
I003	BN96-13020C	Stand Base
I003	BN96-13635A	Stand Guide Neck
I003	BN40-00162A	Tuner
I003	BN96-12723S	LVDS Cable
I003	BN96-12942B	Speaker
I003	BN96-13273B	Speaker
I003	BN59-01042A	Remote
I003	BN96-09872R	Power Cord
I003	BN96-10788A	Accessory Pack



Power On Sequence:

1. **STBY 5V (CN801, #2, 5v)**
2. **PS_ON (CN801, #1, 3.3v-0v)**
3. **VS_ ON (CN802, #6, 0-3.3v)**
4. **Panel should illuminate briefly**

② CN801 (SMPS) ↔ CN201 (Main Board)

Pin No.	Signal	Pin No.	Signal
1	PS_ON	10	18V
2	STD5V	11	18V
3	5.3V	12	5.3V
4	GND	13	5.3V
5	GND	14	GND
6	GND	15	GND
7	GND	16	15V
8	N/C	17	15V
9	N/C	18	15V

③ CN802 (SMPS) ↔ CN2000 (Logic Board)

Pin No.	Signal
1	D5.3V
2	D5.3V
3	GND
4	GND
5	PS_ON
6	VS_ON

④ CN803 (SMPS) CN4001 (X Board)

Pin No.	Signal
1	Vg
2	GND
3	GND
4	Vs
5	Vs

⑤ CN804 (SMPS) CN5001 (Y Board)

Pin No.	Signal
1	Vs
2	Vs
3	GND
4	Vg
5	GND
6	Va

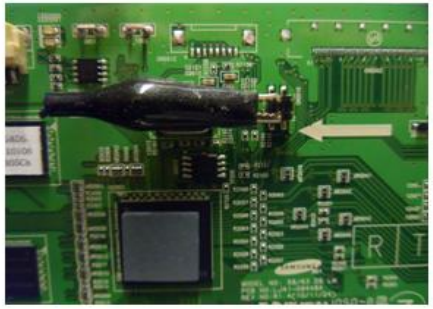
⑧ CN1601 (MAIN Board) ↔ POWER&IR

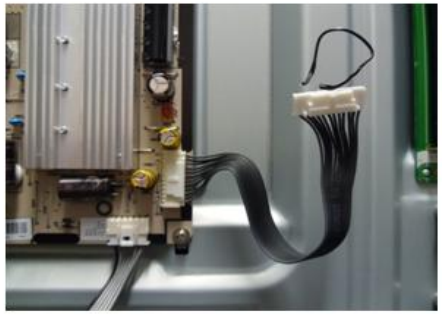
Pin No.	Signal	Pin No.	Signal
1	IR	6	KEY_INPUT1
2	AGND_IN	7	KEY_INPUT2
3	A5V	8	AGND_IN
4	LED_STB	9	A5V
5	BUZZER	10	LED_CTRL

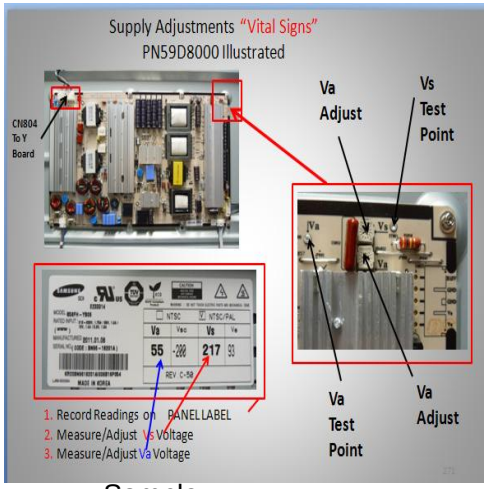
"Troubleshooting"

Activating Power & Logic Board Test Patterns without Main Board:

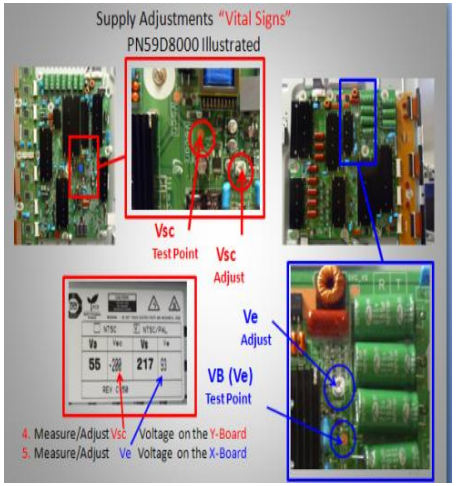
1. Remove Power Cord to Panel
2. Short Highest 2 Pin #s on Logic Board Test Jig (Can be 4 Pin or 6 Pin)
3. Remove Power Connector at Main Board (keeping connection to SMPS)
4. Short "Power On" Pin to Circuit Ground on Power Connector to SMPS.
5. Connect Power Cord to Panel







Sample



Power Supply Trouble Shooting Notes:

2010/2011 models

Will not be run with the "X" or "Y" main disconnected. The SMPS will shut down immediately. However if a meter is first connected to the test point when power is applied it will read the correct voltage briefly before shut- ting down.(You have enough time to check key voltages)

CAUTION: Do not reconnect any connectors to SMPS or Y/X Boards until power has been turned off long enough for Vs to drop below 10V or damage will occur to X or Y Boards.

SMPS Over Current Protection

If a short circuit occurs on either the VS or VA voltage lines, the SMPS stops operating, but should not fail. When the short circuit is removed from the source line, the Power Supply will operate normally again. **Many SMPS Supplies are replaced needlessly!**

"VITAL SIGNS"

When troubleshooting, It's very important to first check **Vs, Va, Vsc & Ve**
If **Vs** is missing (0V), disconnect power and check for short. Use ohm meter to measure resistance while disconnecting Y-Board & X-Board supply feeds one at a time.
Turn Power On and Test SMPS with shorted connector removed for correct Vs voltage verification. (It may only come up briefly but to full level). Be careful not to reconnect power connectors until Vs falls below 10V.

If **Va** is low or missing, disconnect power connectors to Address Boards and Check to see if SMPS Supply is restored. (Note Va feed normally passes through the Y-Drive to the Address Boards (Logic Buffer Boards).

If **Vsc** is low or missing and Vs is OK, the failure is with the **Y-Board** since the Y-Board generates the Vsc voltage from the supplied Vs.

If **Ve** is low or missing and Vs is OK, the failure is with the **X-Board** since the Ve is generated by the X-Board from the supplied Vs. (Please note: In some rare cases the Ve is generated by the Y-Board fed to the X-Board.)

Other SMPS Voltages:
Check Low Voltage feeds to the Main Board and other supplied Assemblies.

TROUBLESHOOTING VIDEO PROBLEMS

1. Verify Video Operation

a) **Customer Picture Test** (if available)
b) **"Display"** (If display is OK source is suspected)
c) Substitute with known good Source (**external DVD or Signal Generator**)

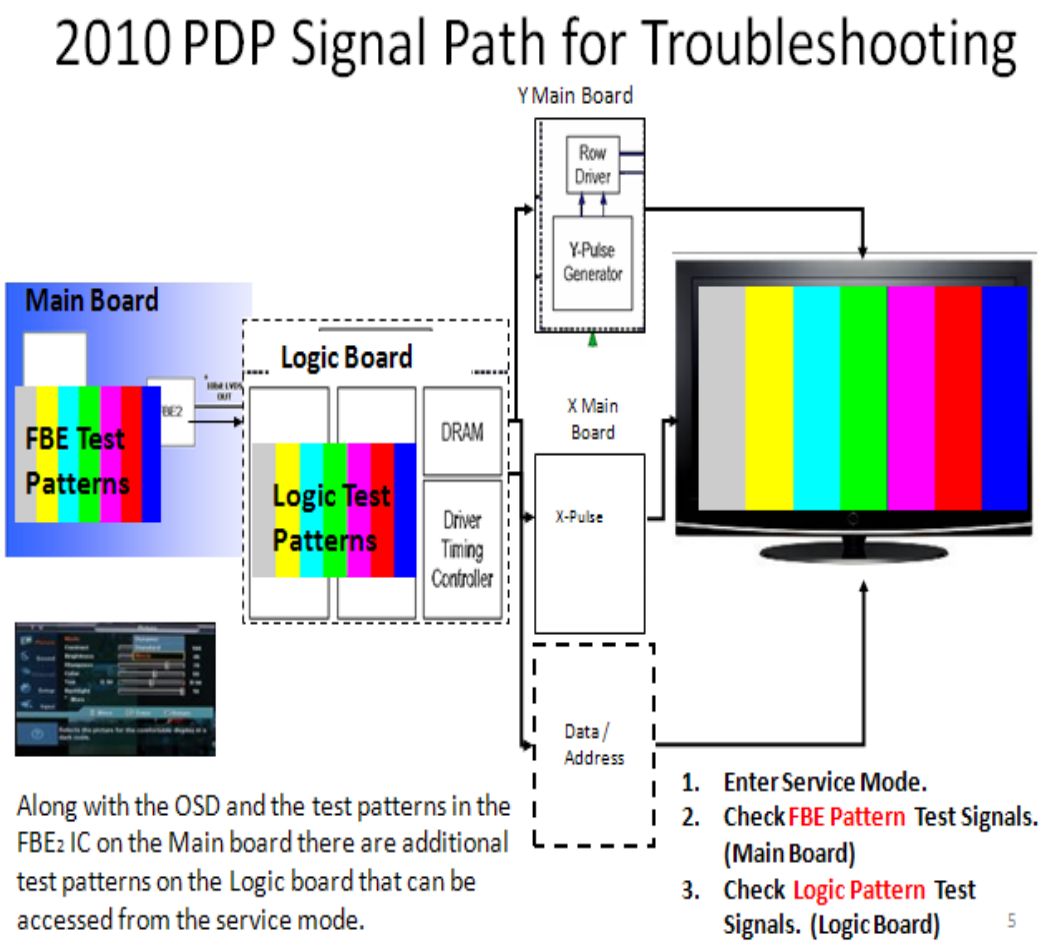
2. Using Test Patterns in Service Mode

- ENTERING SERVICE MODE –

Customer Remote:	Service Remote:
1. Power off	1. Power On
2. Mute, 182, Power	2. Info, Factory

3. Determine cause

a) If Logic pattern is NG; Logic board, Logic buffers or Panel are suspect.
b) If FBE patterns is NG and Logic is OK; Main or LVDS cable are suspect.
c) If both are OK it is likely a source issue.



ALIGNMENTS & OPTION BYTES :

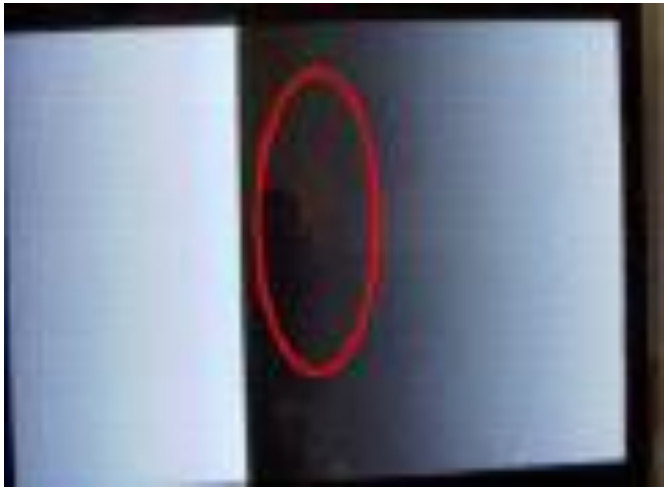
1. **Check/Adj. VS, VA, VE, & VSC according to Panel Label and Diffusion test. (see bulletins for any special notes before making changes)**

2. **Check/Set Option Bytes:**
   - ENTER SERVICE MODE -
   a) Customer Remote: Power off; Mute, 182, Power On
   b) Service Remote: Power On; Info, Factory

Model Code:	PN58C6500YFXZA					
	Option					
Side Label	Type	Model	Tuner	Light Effect	Country	Front Color
I003	58FArV1	PC6500	SEMCO	OFF	USA	T-C-Black
I004	58FArV1	PC6500	SEMCO	OFF	USA	T-C-Black

DIFFUSION TEST/ADJ. (cell miss-firing, older units)

- Allow the unit to warm up 15 to 20 minutes
- Access the Burn Protect Sig. Pattern in Cust. Menu.
-Adjust the Vs volts until screen errors are gone in both dark and bright areas.
- Adjust the Vs volts within +/- 10V on the panel label.



SPECIAL NOTES:

See bulletin “Red Dots” for correction/ adjustments for this model.